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A

TREATISE ON THE SUBLIME SCIENCE OF *HELIOGRAPHY,* Satisfactorily demonstrating our Great Orb of Light, **THE SUN,** TO BE ABSOLUTELY NO OTHER THAN **A BODY OF ICE!**

Overturning all the received Systems of the
Universe hitherto extant;

PROVING

The celebrated and indefatigable SIR ISAAC
NEWTON, in his Theory of the Solar System,
to be as far distant from the Truth, as any of the
Heathen Authors of Greece or Rome.

By CHARLES PALMER, GENT.

L O N D O N :

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1798.

A
STATE

THE HISTORY OF THE

AMERICAN REVOLUTION

BY JAMES BROWN, M.D.

THE SUN

MANUFACTURED BY THE BRITISH MUSEUM



ABOLITION

OF SLAVERY IN THE UNITED STATES OF AMERICA

(WITH A HISTORY OF THE SLAVE TRADE)

BY JAMES BROWN

MANUFACTURED BY THE BRITISH MUSEUM
FOR THE USE OF THE LIBRARY OF THE
UNIVERSITY OF TORONTO
AS A GIFT FROM THE AUTHOR

BY JAMES BROWN, M.D.

1800

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1800

DEDICATION.

TO THE

Genius of Liberty,

The Guardian of Great Britain.

MOST POTENT GENI!

TO invoke thy aid by solemn prayer,
by martial hymn, or by gay song—whether on
Ocean's boisterous deep—in harbour safe from
tempestuous storm—or on Terra-Firma's wel-
come shore. Thy devotees are ever glad to
commemorate thee for thy benefits in their
valour—their strength—and their wealth! Thou
art in their copious libations—their glory—their
toast—and their glee!

I invoke thee, most powerful spirit, to
continue to this our isle thy aid to the work
so nobly begun, and hitherto gloriously carried
on, hasten to finish it with never fading glory.

Millen.

Millennium is in thy grasp! A powerful sep^tre
of peace is in thy right hand! O let thy sacred
Son, our most gracious sovereign, by the power
thou hast given him on the ocean—extend it
now in all directions from east to west, and
from north to south, to make it all his own
dominion.

Let in him rest the medium of all con-
tending powers—diffusing his blessings of peace
and protection to all the inhabitants of the earth,
even as the medium of light the SUN, the subject
of this treatise, diffuses his blessings of light and
heat to the whole creation.

As thy bright star directed in past ages
the wise men of the east to the person of the
Saviour of the world, so now in like manner
direct the wise men of the north (the cabinet
counsellors of the kingdom) to HIM, the arbiter
of peace, the sovereign of the seas. Direct
them no more to harbour his fleets of war, but
continually to ride on the extended ocean to
protect all commerce, foreign as well as domestic.
Direct them by a strong determination to become
universal underwriters, and publicly and formally
declare the same to the world, thereby causing
a continual peace to the inhabitants of the mara-
time

time powers of the whole globe, and war only with their rulers the enemies of peace whosoever they may be, anarchists and plunderers of mankind, or where ambition and oppression shall outstride justice. By underwriting and protecting the commerce of their merchants, war is thereby made stronger against their usurpers.

Let them see that such a declaration, with or without the co-operation of our allies, will have the immediate effect of peace, the very probable rise of our funds, even above par. Let thy light so shine upon them, that they may see the practability of this grand plan—the justice and policy of which will be apparent from the protection of commerce being repaid by *universal underwriting* that ought to devolve to the power that protects.

The wealth hereby acquired will be best calculated by the consideration of about ELEVEN MILLIONS of pounds sterling being paid annually to the DRONES, the underwriters of the commerce of this island only!!!

THE THIRD.
Objections there may be, and many, but none insurmountable; any plausible ones will be found

found only in weak and groveling minds. What difficulties can the stewards of more than fifty millions of pounds sterling annually, have to contend with?

As a drop falling from the eve of a house, by persevering wears a hole in a stone, so instruct them to persevere in this great work, by applying the millions annually that must arise beyond the necessary expenditure of so great an establishment as is in view, to the purchasing of both ships and even harbours, till every harbour in the known world that may be deemed necessary to be secured to these realms are secured or destroyed, as there has not yet been, or ever will be *any thing* to which there is not a price. Thereby all the counsels of the several governments of the earth will centre in the medium of our most worthy sovereign.

Taking the region of the air into your all potent direction—giving the earth, with all its plenty to its peaceable inhabitants—bestow upon, and confirm for ever the third grand element of water, the ocean, to our George, emphatically THE THIRD.

These

These thy instructions, Most potent Spirit, in the month of September, 1797, I communicated to the Minister, and afterwards renewed it in the month of November following, but the light necessary to discern them, I have not since been called upon to explain or illustrate.

I am therefore to invoke thee, O Spirit of Illumination, to shine with such resplendent lustre on the ministry of our Sovereign, that they may see clearly thy great good will, and my humble intentions—tell them what a great spirit once told a great man, after shewing him all the kingdoms of the earth, “If thou wilt worship me, *All shall be thine.*” Thus settling the millennium of peace to the earth, *I follow thee to the light of the celestial regions above!*

THE AUTHOR.

PRE-

P R E F A C E.

THOUGH this may be said to be an age of reason, in which Deism is propagated with luciferian malignity, by the disciples of disaffected ignorance, who deny all order and subordination, yet it is to be hoped that there are multitudes of individuals who willingly consult their own happiness, in paying attention to every medium by which valuable knowledge may be acquired, that ultimately must tend to a sanction of their laudable pursuits.

Let study and application be ever so intensely followed, yet the operations of the Deity in carrying on the orderly works of creation in their natural routine are such, that the mode and the means are impenetrable to our senses—as the great powers of nature are all invisible.

Gravitation, electricity, and magnetism, though constantly present, and continually exerting their influence; though within us, near us, and

and about us; though diffused throughout all space; overspreading the surface, or penetrating the contexture of all bodies, depend upon substances and actions which are entirely concealed from our senses! Such is the Supreme intelligence in himself; "*Who only hath immortality dwelling in the light, which no man can approach unto; whom no man hath seen, nor can see.*"

But from what is given us by divine permission, by the inspired penmen, sufficient data have been collected, so as to form a select hypothesis upon such principles, that every person must embrace this new doctrine, which flows from the pure and simple fountain of truth; viz., that the sun is the medium or organic conveyance of light ONLY.

It is not my intent to build upon any foundation heretofore known, nor yet detract from the labours of others; but would rather dwell upon the excellencies of authors, than discover their defects, if I had found any congenial to my plan; the novelty of which, will probably raise an host of opponent's, many of whom numerically speaking perhaps ninetenths

may be ignorant of any system of cosmography whatever, and will only be displeased to find the sun divested of his burning rays.

Those who have the talent of ridicule are apt to hold in derision any system which gives them an opportunity of indulging their beloved propensity: but these are individuals which are at liberty to exercise their wit as they please.— Whilst those who are competent to the task of impartial criticism, may be inclined to find fault ere they have examined the work:—yet it is my ardent hope and opinion, from the most rational inference I can draw, that on a candid perusal every objection will be removed, and my hypothesis freely admitted.

19 DE 63

THE SOCIETY OF FRIENDS FOR THE
PROPAGATION OF GOSPEL KNOWLEDGE
IN THE EAST AND WEST INDIES
AND OTHERS TO A FORERUNNER OF
THEIR WORK IN CHINA,
19 DE 63

A TREA-

A

T R E A T I S E

ON THE SUBLIME SCIENCE

• F

HELIOGRAPHY.

SECTION I.

INSTEAD of adopting the received opinion of philosophers, that there are four elements, or cardinal principals, in the composition of material substances, namely; fire, water, air, and earth; I maintain there are only three, viz. earth, water, and air; and of these only consist all matter and motion.

Let us for a moment consider the property of what is presented to our view, and rationally descant on the verity of this position, and for ever afterwards we shall remain convinced of the elegant simplicity of the fact, that nature is in *all her ways TRIUNE!*

B

We

We find in the Almighty as well as in all his works, a Triune Principle—for every classification has its order, genera, and species; so that every thing throughout nature has or consists of three component parts. Hence we comprehend a Trinity in Unity of the Deity, a Trinity in the creation of earth, sun, and moon; and from thence deduce the fact as related by the prophetic Law-giver, Moses; that God created man, in his own image, and in his own likeness. By which we are to understand, that man has three detached or distinct component essences in his formation; namely, the material or corporeal animal substance, the immaterial electric fluid or spiritual entity, and the attributive or mental reasoning faculty, which exercises an unlimited privilege throughout all place and space.

Whatever is in *Nature*, is in *Being*, whether animate or inanimate—for it must be allowed an universal dogma, that in place or space there is no vacuum—as this happy axiom resolves all the acroatic or abstruse series of science, as well as religious tenets—That the Almighty by his omnipresence fills or pervades all, space, and place.—As by his omnipotence is in all power, majesty, and glory, and by his omniscience

omniscience sees all things before, in, and after time—consequently God is, all, in all—past, present, and to come; whose is the kingdom, and the power, and the glory.

Were we to ascend the scale of acromatic, or sublime contemplation of the origin of all things, what could we gain without the light of his transcendent influx is permitted to be remembered by the faculty of mental record? Alas! it would be of no avail! Daily we are made acquainted with the researches of the scientific and inquisitive sons of erudition, yet few or none are permitted to taste of the cup of felicity, or marked privilege in discovering any thing new or of real utility to mankind. But by a due observance of the grand operations of triune nature, the ridiculous notion that has grown old with time, that the sun was a globe of fire, burning always with an ardent and intense heat, must, if, of material substance cease to exist long ago; unless it was continually supplied with fuel. It is now high time to extinguish such an absurd hypothesis, and eventually prove to the most satisfactory and clear demonstration, that the sun is no more a body of fire than the moon, nor has it any of the destructive qualities of that agency, called fire; which

always was, and now is, an attendant on matter, as a latent principle, servilely obedient to reduce all natural bodies capable of compression to their least possible magnitude—and constantly resides in the three grand elements of earth, water, and air; though the former may be said to be its parent, and always gives its birth; for without substantial matter, friction and air, the pyrotechnical or fiery medium could not exist.

The atmosphere which surrounds the earth whereon we dwell, may with great propriety be denominated, and considered as a great aerial ocean formed of a peculiar fluid; the bottom of which we occupy, and whose surface is at an unknown height,

From its primary law, that is, from its fluidity, this ocean has a constant tendency to an equilibrium, and consequently to remain stagnant; but the rays of the sun have that regular and stated influence of calling into action the law of expansion, excites an agitation in it, which keeps all its competent parts in a state of perpetual motion.

The particles of which this ocean of air is composed, though not visible to the eye, have the property of being capable of dilatation and compre-

compression, which is contrary to the property of the aqueous fluid called water.—The former in its ordinary capacity being so much lighter than the latter, as to be in a ratio as one is to eight hundred. The property of expansion is more especially called into action by the presence of heat which occasions the air to rise, and of course contains in an equal space fewer particles in a warm room than in a cold one. To reduce this to example, founded on real experimental knowledge—let us suppose a chamber which has a fire-place, and is warmed by a large fire; the air affected by it will rise instantly to the ceiling, or up the chimney, and that which is near it will take its place: when the air is heated, it will follow the first, and a constant current upwards, supplied by the influx of the lateral air; so that the hottest air will diffuse itself in the upper part of the room, and the less heated in the lower; each of them continuing to seek an equilibrium, agreeably to the general and inviolable laws of fluidity.

If we apply these observations to what passes in the atmosphere on a larger scale, we shall find they explain the greater part of the phenomena of anemography, or the doctrine of the winds.

Hitherto

Hitherto the sublime science of astronomy has been demonstrated upon feigned hypothesis, in which the mathematical conclusions though true in themselves, cannot be said to systemize the laws of matter and motion. Hence the errors of all those who have respectively raised a superstructure on mixt mathematics without any criterium of evidence from natural or revealed knowledge.

My aim is to follow a new and rational plan, grounded on the Word of God in the Scriptures, which has the Rock of Ages to support it secure and stedfast from the quicksands of false opinions.

We are convinced from the words of Moses, that the days and nights, or measures of time, were exactly the same, the three days previous to the creation of the sun and moon, as they have been since under parallel latitudes—or as a natural computation of the earth's revolution on its own axis:—hereby we are enabled to give assurance to all mankind, that the two shining, or apparent luminous bodies the sun and moon, have no primary influence to rule or direct either day or night.—For the first thing we read in the account of the creation, after the Almighty had made

made the heavens and the earth, that the Divine Being SPOKE ! and the great blessing of *light* flowed from his first most gracious words, “*God said, let there be light, and there was light;*” how then can the sun which hitherto has been supposed to be a great globe of fire, and to give light and heat to the whole creation have acted before it was made? Did it put out the original light of God, appointed to illuminate the whole creation three days before it was made, when it began to rule over day on the fourth day? No, most evidently.—God cannot be considered or supposed to make void, or annul on the fourth day, what his infinite wisdom had thought best to be done in the first day’s creation.—But we may rationaly infer that both the sun and the moon are mediums in the hands of the Almighty, to diffuse his blessings of light and heat, and to measure times and seasons.

The sun is the instrument which conveys the clearing luminous rays from the habitation, or abode of God. And as in all other cases, it belongs to the power of triune influence;—being the secondary cause of light. The essence is in the Deity—the agency in the sun—and the effect on the earth—and all things which receive or participate

ticipate of this transcendent bounty flowing from the radience of the Almighty! In the contemplation of whose works there remains no other comment, than that of unfeigned thanks for the gracious permission, to approach the glorious architect and cultivator of nature: who condescends to convey the influx of celestial glory to the inhabitants of this neither world, through the medium of his organic rotatory the sun.

The real phenomena of nature could be easily accounted for, if the absurdity of a burning globe had not been attributed to the sun—the speculum of ethereal delegation. And it would require but little persuasion, to convince every serious reader, that such chimerical schemes of the universe in the numerous fiery attributes given to the lamp of day, are repugnant to the laws of God in the operations of nature—which are all perfectly regular and fundamentally clear and consistant.

Could we but pay attention to the too much neglected book, the Bible, we should find valuable learning that would soon convince the most obstinate, that all light proceeds from God; and not from any perpetual lamp of fire as is vulgarly imagined.—It requires only attention to obtain conviction on this head.

From the creation of Adam, the calling of Abraham, and even until the days of Moses, and continued down to those of king Solomon.—God visited the several generations of man, with his acceptance of their sacrifices and offerings, by his gracious condescension in fire; or great light to consume it.—And his first appearance to Moses in Mount Sinai was, as it were; a bush burning unconsumed.

In the second book of Moses called Exodus, which signifies Going forth: emphatically, the going forth of the Children of Isreal from Egypt —and contains three great events, namely,

- 1st. The wonderful deliverance from bondage;
- 2nd. The raining of manna from heaven; and
- 3dly. The giving of the Law on Mount Sinai.

In the last of these extraordinary occurrences, there is a *memento* well worth recital in this place to prove, that only from the Divine Presence can illumination or light proceed:—as in the origin of light and truth, can that inestimable and glorious vision have its source.

In the xix chap. and 9 verse, of this book, God said to Moses, “ I will visit thee in a thick

“ cloud:”—as the Lord was certain his creature could not bear the glory of his countenance, so he promised a thick cloud should be a covering to conceal his resplendency.

In the xxiv chap. we read that Moses and Aaron, and Nadab and Abihu, and seventy of the elders of Israel, went up, and saw the God of Israel:—and there was under his feet, as it were a paved work of sapphire stone.—And the glory of the Lord shone with such lustre, as to be far above the glory of the sun in his meridianal altitude, notwithstanding the thick cloud that the Lord had prepared to cover himself with.

In the xxxiv chap. of this book, and the 29 verse, to the 35 verse inclusive, we read as follows; “ And it came to pass that when Moses came down from Mount Sinai, with the two tables of the testimony in his hand, he wist not that the skin of his face shone, while he talked with them. And when Aaron and all the children of Israel saw Moses, and behold the skin of his face shone, they were afraid to come nigh him. And Moses called unto them, and to Aaron, and all the rulers of the congregation returned unto him; and Moses talked with them,

" them, and afterwards all the children of Israel
 " came nigh, and he gave them in commandment
 " all that the Lord had spoken with him in Mount
 " Sinai. And until Moses had done speaking
 " with them, he put a veil on his face. And
 " when Moses went in before the Lord to speak
 " with him, he took the veil off, until he came
 " out. And the children of Israel saw the face
 " of Moses, *that the skin of his face shone.* And
 " Moses put the veil on his face again until he
 " went to speak with the Lord." So that the
 face of Moses, notwithstanding the thick cloud,
 received so much of the glory of God's shining
 light, that the children of Israel were terrified and
 greatly afraid of him, doubting him to be in the
 body; as his face shone with resplendent lustre,
 far beyond any thing this world affords to give
 in resemblance, and indeed all attempts would
 be only able to give a faint representation.

If we scan by analogy the mode by which
 Moses became so bright and shining,—we must
 apprehend, that the rays of light proceeding from
 the Almighty, though shaded with clouds almost
 impenetrable for their thickness; yet, notwith-
 standing, reflected the rays of God's glory and
 brightness on the face of the meek Lawgiver
 with such lustre, that even Aaron the high-priest,

his brother, and the seventy elders of Israel were all dismayed and fled, till he covered his face and called unto them to return, and by explaining to them the cause, and by some intreaty he was able to persuade them to draw near.

Many are the quotations that might be given from both the old and new Testament, however I have thought fit to select only a few —for long details, where brief narrative will do as well, should ever be carefully avoided.

In Ezekiel, viii chap, 2 verse, “Then I beheld, and lo, a likeness as the appearance of fire; from the appearance of his loins even downward, fire; and from his loins even upward, as the appearance of brightness.” And x chap. 4 verse, “Then the glory of the Lord went up from the cherub, and stood over the threshold of the house, and the house was filled with the cloud, and the court was full of the brightness of the Lord’s glory.”—Psalms civ. and 2 verse, “Who coverest thyself with light as with a garment.”—Matthew, xvii chap, 1 and 2 ver. “And after six days, Jesus taketh Peter, James, and John his brother, and bringeth them up into an high mountain apart; And was transfigured before them: and his face did shine

*"shine as the sun, and his raiment was bright as
the light."*

We find in the ii chap. of St. Luke, 8 and 9 ver. when the angel, or apparition of God was sent with the glad tidings, to announce the birth of the Saviour of the world, it is there expressed. " And there were in the same country shepherds abiding in the field, keeping watch over their flocks by night, and the angel of the Lord came upon them, and the glory of the Lord shone round about them, and they were sore afraid." Again in the ix chap, 28 and 29 ver. " He took Peter, and James, and John, and went up into a mountain to pray. And as he prayed, the fashion of his countenance was altered, and his raiment was white and glistening. And behold, there talked with him two men, which were Moses and Elias." Hence we may infer the necessity of our Saviour's being changed like unto his heavenly visitors, to enable him to hold a familiar conference, relative to the sufferings he had to undergo for the sins of mankind.

And early in the morning, on the third day after his crucifixion; by the same Evangelist, xxiv chap, 3 and 4 ver. is thus written: " And they entered into the sepulchre, and found not the

" the body of the Lord Jesus; and it came to
 " pass, as they were much perplexed there-
 " about, behold, two men stood by them *in*
 " *shining garments*, " &c. And the same circum-
 stance recorded by St. Matthew, xxviii chap.
 2 and 3 ver. is thus expressed. " And behold,
 " there was a great earthquake, for the *angel*
 " *of the Lord* descended from heaven, and came
 " and rolled back the stone from the door, and
 " sat upon it. *His countenance was like lightning,*
 " *and his raiment white as snow.*"

St. John in the Apocalypse giving us a definition of the real light of heaven—says,
 " And there shall be no more night there, and
 " they need no candle, neither light of the sun,
 " for the Lord God giveth them light; and the
 " Lamb is the light thereof."

In speaking of Christ in his Gospel, he says,
 " *In him was light*, and the life was the light of
 " men." By which we are to understand not
 only the *original light* of God, dwelling from all
 eternity in the person of Jesus Christ, but also
 that the allusion was to the mind, " **LIGHTING**
 " every one that cometh into the world."

Was the delegated light conveyed by the
 sun of such lustre, glistening and clearness as the
 light

light of heaven, Paul in his declaration of being converted, would not have told the Jews and king Agrippa, that as he was on his journey, and nigh to Damascus, “ About noon, or mid-day, O king! suddenly *there shone from heaven,* “ *a great light round about me!*”—Intimating by this narration; that although it was the brightest, or most lightsome part of the day; yet he conceived the suns rays to be nothing, comparable to the light which shone from heaven in the presence and person of Jesus Christ;—insomuch that he became blind, for he observes—Acts the xxii chap. and 11 verse. “ *And when I could not see for the glory of the light,* being led by the “ hand of them that were with me.” So that we are certain the glorious light of heaven would be too much for mortal men to bear.—Therefore we may with just cause ground a reasonable opinion, that the sun is a medium used by the Almighty, to reduce the rays of light to an acceptation of the optic perception of men and animals in this transitory world.—And we may truly say with the great apostle I have last quoted, that “ *Now we see through a glass darkly,* “ *but hereafter we shall see face to face,* and “ *know even as we are known.*”

Many

Many ingenious authors have fallen a prey to the indulgence of fanciful classifications, under the idea of systemizing. Disorders of intellect happen oftener than superficial observers will readily admit, perhaps with rigorous exactness no human mind is in its right state! There is no man whose imagination does not sometimes predominate over his reason, who can regulate his attention wholly by his will, and whose ideas will come and go at his command.

No man will be found in whose mind airy notions do not sometimes tyranize, and force him to hope and fear beyond the limits of sober probability. All power of fancy over reason is a degree of insanity. But while this power is such as we can controul and repress, it is not visible to others; nor considered as any destraction of the mental faculties. It is not pronounced madness till it becomes ungovernable, and apparently influences speech or action.

To indulge the power of fiction, and send imagination out upon the wing, is often the sport of those who delight too much in silent speculation, when we are alone we are not always less busy: the labour of excogitation is too violent to last long; the ardour of enquiry will-sometimes

times give way to idleness, or satiety.—He who has nothing external that can divert him; must find pleasure in his own thoughts—and will conceive himself what he is not. For who is pleased with what he is? He then expatiates in boundless futurity, and calls from all imaginable conditions, that which for the present moment he should most desire; dances from scene to scene, unites all pleasures in all combinations, and riots in delights which nature and fortune with all their bounty cannot bestow.—But I hope the proofs here given of *original light*, will not be considered by the serious reader, to be those arising from a fanciful, or insane mind.

In a relative sense, no demonstration will be sufficient evidence to dictatorial minds unless it admits of axiomatical conclusion; and this arises from the wretched circumscription of prejudice.

Originality in arrangement of science, will always be esteemed of high value by the judicious and reflecting individuals of all nations:—for without inventive application, the republic

of literature would soon dwindle into a state of insignificance and contempt.—Therefore it is presumed candour, and consideration, will be liberally bestowed by the discerning part of the community, when those who are competent to judge, give this treatise a serious perusal.

SECTION

SECTION II.

THE view of heaven in a calm day, when the sun is cloathed in his bright and dazzling radience—must inspire the most phlegmatic with sublime and towering ideas, and leave a deep impression on the mind, that the Author of the stupendous work in view, must himself be more great and glorious than the imagination can suggest: even if revealed knowledge had been denied.

Who can behold a fine clear night, when the moon is arrayed in all the cool lustre of her silver hue, attended by her innumerable company of glittering beauties, the erratic host, and all the stationary chiefs who rest in majesty profound, without solemn adoration of the Great Supreme, who created all these goodly objects for causes to his wisdom only known?

Will not the soul whose solace is raised to the remotest sphere, with the great apostle wish for a dissolution from cumbrous clay—to get free, and rebuild in ethereal regions the form of

man—and by this escape from earth to heaven—to mix with happy spirits—the adopted children of the Great *I AM*?

But what is our excuse, when we deny ourselves this constant satisfaction, of seeing the beauties of creation—and to commune in spirit with the Almighty power that gave all things being?

The strange notions which fancy has created in the sensorium of all the race of astronomers, who have hitherto wrote on the divine and sublime science of astronomy, as far as regards the magnitude, matter, and motion of the planets, have been for the most part confined and servile imitations of each other.—Nor has that science made any progress for a series of years; our own countryman Sir Isaac Newton, having been the last and greatest labourer in the vineyard of learning to find out the excellencies of system. In him we find a great man engaged very deep and assiduously in a bad cause.—For if the sun was actually the center of gravity, and made of such materials as it is feigned by Sir Isaac and others—this world would have two great chances—and both miserable ones! The first, to be burnt,

burnt by the fiery ball of light—and the last, that the ball should burn out, and then the world would inevitably be left in darkness, and all that inherit its heights and depths must perish!

If the sun had been set alight as a material body at the fourth day of the creation, it would have agreeably to the science of cometography been consumed in less than seventy years, even allowing it to be the huge mass that astronomers pretend it to be; but now, if we suppose it has burned or lighted this earth for nearly six thousand years, it would have required eighty-seven renewals of its whole substance, had it been such a dreadful globe of fire as it is represented.

Was it possible that a man could sojourn under the pole, during the tedious night of six months, where every thing is congealed to an amber solid—where the pearly flood is metamorphosed into mountains of ice, and everlasting cristalization; yet could he carry with him the products of inanimate nature; flint, steel, and matches, he would never need the sun's assistance to lend him a spark of fire!

To

To suppose the sun to be a material body, few will have any doubt, but that matter has been burning for near six thousand years without being in the least consumed every one must doubt, or in other words say, the idea is preposterous—or that the sun is to keep burning till the Almighty gets tired of the whole creation, when it will be used in his anger as a medium, to destroy by a general conflagration both heaven and earth as far as we can perceive, is vague and contrary to the progress of creation—for with God all things are fire, if his good pleasure ordains them to be so denominated.

If such an absurdity as a fiery globe could for a moment be admitted, and that all creation is to be destroyed by its fire—how would this great ball of fire itself be extinguished?—If it is to burn for ever with the duration of the Almighty, “*the new heavens and new earth wherein shall dwell righteousness*” would be attended with an OLD SUN.

The more the idea is followed, the more absurd it appears,

We are certainly informed there will be a new heaven and a new earth—that the old are

to be destroyed by “fervent heat,” not material fire.—“God is a consuming fire.”

If the sun was a body of material fire, it would after the manner of all material fires, produce a circular light.—Whereas the light from the sun is in a direct line, reflecting the light borrowed to this world; as may be proved by removing from its influence into a deep well in a clear day, and you will see all the stars as in the darkest night.

If the sun was a body of fire, would not the heat be more felt the nearer it could be approached? But from the experience of the several gentlemen who have left the earth in balloons even in the height of summer, we find a very different account; for the nearer they have approached the sun the more they have found the cold increasing, that from extreme heat on the surface of the earth, to about one thousand, seven hundred and sixty yards in the zenith of the atmosphere, a change was found to be so extremely great, that it might well be denominated a region of ice!

They

The united proofs given by the several aeronauts or air navigators, of the intense cold they experienced in so small a distance from the earth, compared to the distance of the sun, is not the only proof; for the various high mountains where snow is continually on their summits, and the vales beneath are warm, even in such hot climates as those of Mexico and Peru, where there are mountains impassable by either man or beast, and as some say even by birds:—the height being such, so as to cause their tops to be covered with eternal snow!

There is a large island in the North, or frozen sea, peopled by the Norwegians called Island; its longest day in the summer solstice is twenty-four hours without any night, and so contrarily when the sun enters capricorn there is no day, the air is extreme cold, and the country generally mountainous and barren; yet in some level parts there are pastures and meadows so rich, that the beasts that are put therein must be fed by measure, or they would burst themselves with feeding: in this island are very high mountains covered at the top with continual snow, yet nevertheless at times vomit fire; the highest is called Hecla, in which there are rich mines of brimstone.

There is a famous mountain frequently spoken of in the old Testament, which separates Syria from Palestine, called Libanus. It is computed to be higher than the Alps or Pyrenees. It is inclosed with four enclosures of mountains which rise one upon another; the first is very fruitful in grain and fruits; the second very barren, abounding in thornes, rocks, and flints; the third though higher enjoys a perpetual spring, the trees being always green, and the orchards always loaded with fruit; the fourth is so high that it is uninhabitable, on account of the extreme cold, being always covered with snow.

There are many high mountains in various parts of the world, where travellers of every description have uniformly found snow and ice on the tops, whilst the air below has been temperate or warm; and this has been in proportion to their elevation above the plane of the earth, though absolutely nearer the sun. So that we are fully satisfied the nigher we approach the sun, the colder it really is.

Moses, who so frequently conversed with God, and from whom he received the account of the creation tells us, that the waters were divided, " and God said, Let there be a firmament

" ment in the midst of the waters ; and let it
 " divide the waters from the waters. And God
 " made the firmament and divided the waters
 " which were under the firmament from the
 " waters which were above the firmament : And
 " God called the firmament heaven." So that di-
 viding them as described by the great Lawgiver,
 they at once become congealed or frozen, and
 were placed by the Almighty so as to reflect the
 light of heaven.

The first thought I had of the sun being a body of ice was from experiments in natural philosophy with a convex glass, commonly called a burning glass ; I prepared tobacco as combustible matter, then the glass receiving the rays of the sun, collected the heat of the floating atoms of the radius and refracted that heat to the fucus, where by the friction of those rays they set the combustable matter on fire ; or in other words on atomatical agitation, for friction always produces fire.

If a lump of ice could be placed so as to receive the rays of light from the sun, it would act the very same as the glass.

If we admit that the sun could be removed, and a terrestrial body of ice placed in its stead, it would produce the same effect,

The sun is a crystalline body receiving the radience of God, and operates on this earth in a similar manner as the light of the sun does when applied to a convex mirror, or glass, reflecting the heat of the earth to itself, which we feel more especially when under the influence of its focus, increasing in proportion the more or less it is situated from the horizon.—The summer more intense—the winter less so.—Its effect will be described in the following section.

Much might be added in descant on this truly sublime influx of Deity—and ultimately remove the strange and wild space, power and influence attributed to the lamp of day, (which can be easily demonstrated to be considerably less than our earth) but the exact demensions—situation—delegation—and operation of the great works of the Almighty now are, and ever will remain hidden from the evanescent and frail mortal, man, till he is transplanted into the region of beatific vision and celestial consummation—divested of error and fiction,

SECTION III.

A MODERN writer speaking of the sun, says—“ The judgment of astronomers in infant ages, has been greatly baffled in their researches into the nature and properties of this supposed igneous body; nor have our modern philosophers as yet definitively determined upon its inherent quality: it has long been considered, and it is the opinion of that great philosopher Sir Isaac Newton, that it is an immense solid mass of inexhaustible fire, diffusing its influence throughout all our system, and distributing its light and heat to the surrounding planets, in proportion to their approximate situations.”

Hereafter it may not be thought a presumption to differ with that great man as well as the universally received opinion of others.—The candid and impartial reader will draw his own inference,

If there be any further demonstration wanting to what has already been said in proving the sun to be a body of ice, it must be in the consideration of the cause of the heat which we feel, imaginarily proceeding from the sun, whereas

*in fact it is the earth's own heat refacted by the rays of light.



Great is the cause of all created matter and spirit,—and great must the effect be which proceed from infinite wisdom!

"He who only hath immortality dwelleth in the light," maintains and supports all creation, celestial as well as terrestrial by his immediate influence: from the effect of that light passing through the sun as a medium to us in the perpetual state of his travels, causes the rays of its light to fall in constant circular motion with itself on this earth: the rays of light being thus continually agitated, or rather kept in a state of perpetual friction produces heat; which is felt more where the focus of that light falls, and less in the proportion of distance from that focus: the heat produced by this friction materially affects not only the great waters which compose the seas and rivers, but most assuredly the air we live and breath in, so as to make it both expand and dilatate, the former in the presence of light, the latter in its absence.—Owing to this cause, and from its effect, the air is drawn up (being eight hundred degrees lighter than water) as it were

to a point, holding or encompassing the earth and sea in its embrace; and that point continues to follow the sun's motion. To illustrate by example, let us suppose a twenty-four pound shot was covered with canvas somewhat bigger than itself, suspend it from thread to thread in any given direction, it will evidently move the ball enclosed.—And if the cover exactly fits the ball, then both would be turned round in just the same time.—But if the cover was considerably bigger than the ball enclosed, then the ball would be turned round oftener than the cover, according to the proportion of its demensions or distance from the point in allusion: that is to say, the ball enclosed might go round once and a half or three quarters, during the time the cover was only going once. From this conclusion it is easy to determine the sun's distance from the earth, as well as his magnitude and revolution, which in the course of twenty-four hours and about fifty-five seconds, causes the earth to revolve twice on its own axis during the time the sun is taking his diurnal circle. When we first are impressed with this thought, it may appear that we should see the sun both set and rise twice in that space of time, but the sun travelling in the same period with the earth accounts why it should not.

This

This simple and natural system of the phenomina of nature, and physically accounting for the cause of all things proceeding from God in the triune operation of his works; demonstrates the actual rotatory motion of the earth, the ebullative motion of the sea, denominated tides, as well as the concussive motion of the air or veering of the winds: and is the cause also of the increase, support, and decay of all life, whether vegetable, animal, or in the waters.

The whole of the creation that we can view is as it were a **DROP**—the sediment of which we inhabit—and the ocean of air we breath in, and that surrounds us is at a certain distance—a firmament—a firm body of ice—beyond which—the idea of Moses is, that the Almighty placed the divided waters, the sun, moon, and stars.

The wonder working power of magnetism has evidently the two extremes of the earth under its immediate influence, commonly denominated north and south poles, repelling each other by a certain circumscription; whilst the sun has the equinox or middle zone under his influence, whereby he empowers and attracts the air, the water, and the combination of both with the earth;

earth; as is apparent in the sap of all vegetation going upwards or tending towards the sun.

These two great powers attracting to themselves in such extremes, produce that heretofore undefined power called gravity; each drawing to its source with such immense force every earthly matter.—The more dense or what has the least particle of air or water, with the stronger attraction, and the less so in bodies containing more air: and this power they receive from the cold region that surrounds the earth.

When the loadstone attracts iron it is thereby attracted itself with the same force.—If two loadstones are brought near to each other, the boreal or north pole repels the boreal of the other—but will attract or adhere to the austral or south pole. Thus the poles of different names approach each other, and the poles of the same name always retire or repulse one another: hence the magnetic power calls into action many combinations, which with the sun's opposite power in drawing combinations to itself in a different direction, causes a ferment of electricity throughout all nature.

The laws of gravitation though so common in practice, both voluntary and involuntary, are very little understood. Every thing in nature whether animal, vegetable; or mineral, has a tendency towards a center of gravity and there be at rest; but the rotatory motion of the earth is such, that it calls into action the magnetic or assimilating principle, which by the laws of adhesion disturbs the equilibrium of the atmosphere, which never fails to produce electricity.—This may be defined to be nothing else than some or one of the elementary bodies of earth, air, or water, coming in contact with another, by which is produced (whether they assimilate or cohere) that destructive though necessary operative principle called fire.

As all tendency to rest is gravitation; also all tendency to exertion is electricity, and likewise all agreement in principle or congenial parts is magnetism.

As in this world we find every thing differing, there being no two things alike, according to the wisdom by which all things are made, we may infer fire and heat to be the properties of this world only; at least we know them to be the property of the earth; coal, wood, oil, &c.

are only earth.—Fire in every sense is the property of the earth—witness the sulphurous vapours that take fire in coal pitts—the several volcano's in different climates.—And from the very bowels of the earth in many parts proceed hot waters, even in the extreme of winter.—It is also very evident the earth must be warm from insects and other creatures getting into it in the winter to keep them from the frost and snow.

In short what are our own natural bodies without the heat of nature, which we imbibe in the very food we eat.—Is it not death that is the food of all life? The death of the grape, and the death of the grain in malt, are the life of the wine and beer we drink;—the death of all flesh as well as vegetation in their passage from death to corruption, produces the warmth we enjoy and all our nutriment.

By our cloathing the heat is retarded from evaporation, for if we were stript naked we should soon find ourselves cold, though there is literally no heat in the covering itself, but it is by the power of returgidation—so the heat of the earth in its motion with the sun, emits or perspires mists and heated vapours which arise from the bosom of the earth, and are refracted by the

the rays of light, which produces the elementary heat we feel.

This multiform excitation operates in the following manner.—All rays of light are spars intermingling with each other, and both water and air are globules or globelike particles;—take a vessel of water and stir it round so as to agitate its surface, and you will find the circle it occasions will have its centre or axle in the middle, the extremity rising higher than the centre; so the rays of light being collected by the sun, are immediately set in circular motion with the proportionate velocity of the motion of the earth, and work to the centre in the same manner.—Thus the focus of that friction returns the heat of the earth to itself. To exemplify by further illustration, suppose the water to be in a quart pot, and it is stirred round with so much velocity, that the sides are near half an inch higher than the centre; then, if it was possible to take the bottom away, it would still adhere to the sides in a body together, which in that case it is plain, that in the proportion as the centre at the top becomes lower than the sides or circumference, so must the centre or axle at the bottom be half an inch lower than the sides at the bottom.

The light of the abode of the Deity in passing through the sun enlarges its circle continually till it meets with the earth, over which it spreads its radius of light, covering or lighting just one half at a time: these rays of light proceeding from the sun in this continued increase, is exactly what may be perceived by holding a convex glass to the light of the sun; the rays of light are immediately spread from the glass to the great circle or radius, but there is also a centre from the glass to the very light-point, or focus, where the heat of the whole of the refracted rays in the radius are refracted to.

Thus the rays of light and heat are refracted, and thus the sun acts as a medium of cold luminous matter, to convey the light of heaven to the earth.

Mr. Walker says " Light consists of an inconceivably great number of particles flowing from a luminous body in all manner of directions; and these particles are so small, as to surpass all human conception.

" That the number of particles of light is
 " inconceivably great, appears from the light of
 " a candle; which if there be no obstacle in the
 " way to obstruct its rays, will fill all the space
 " within two miles of the candle every way
 " with luminous particles, before it has lost the
 " least sensible part of its substance.

" A ray of light is a continued stream of
 " these particles, flowing from any visible body
 " in a straight line, and that the particles them-
 " selves are incomprehensibly small is manifest
 " from the following experiment.

" Make a small pin hole in a piece of black
 " paper, and hold the paper upright on a table
 " facing a row of candles standing by one ano-
 " ther, then place a sheet of pasteboard at a
 " little distance behind the paper, and some of
 " the rays which flow from the candles through
 " the hole in the paper, will form as many
 " specks of light on the pasteboard as there are
 " candles on the table: each speck being as
 " distinct and clear, as if there was only one
 " speck from one single candle: which shews
 " that the particles of light are exceedingly
 " small, otherwise they would not pass through

" the

" the hole from so many different candles without confusion."

" Dr. Neiwentyt has computed, that there flows more than 6,000,000,000,000 times as many particles of light from a candle in one second of time, as there are grains of sand in the whole earth, supposing each cubic inch of it to contain 1,000,000."

Dr. Priestley's observations on the manner in which heat is excited by the reflection of light, says " It is well known that one effect of light, especially when it is dense, as in the sun's rays, is the production of heat, and we are obliged to Mr. Melville for some ingenious observations on the manner in which bodies are heated by light. He observes, that, as each colorific particle of an opaque body must be some what moved by the reaction of the particles of light, when it is reflected backwards and forwards between the same particles, it is manifest that they must likewise be agitated with a vibratory motion, and the time of a vibration will be equal to that which light takes up in moving from one particle of a body to another adjoining.

*digitoris easq; ion blacw yedt adiuncto
estit "*

" This

" This distance in the most solid opaque bodies cannot be supposed greater than $\frac{1}{12,500}$ th of an inch, which space a particle of light describes in the $125,000,000,000,000$ th of a second; with so rapid a motion, therefore, may the internal parts of bodies be agitated by the influence of light, as to perform $125,000,000,000,000$ vibrations or more in a second of time."

The prolific particles of the rays of light are truly wonderful, but the particles of light or ideas of the mind, appear far more astonishing when truly considered.

Man may justly be said to be an epitome of all that has been under consideration.—The mind is, as the Deity that gave it—the electric spirit, the illuminating medium—and the earthly part of man is a little animal, compared to the whole globe a great creature of the Almighty's formation.

The mind may be well compared to a mirror of true reflection, nor can it receive in time or eternity an injury to annihilate it. It is an emanation of the Deity, an eternal lamp of pure etherial light; enclosed or wrapt in electric fluid or spirit, and these two compose what is called

called soul. It is constantly illuminated and perceives every thing by innate ideas, reasons distinctly by sending forth and calling in to its *view* ALL SPACE, and every thing therein contained, and duly and clearly weighs their effect in as it were a less space of time than a millionth part of a moment: its commands are then given to the electric spirit which compels the nervous system of the body to every act. So that we constantly carry about us the light or illumination of the Deity who made us, and gave us this eternal existence.

If the light of the eye fails, hearing conveys the same to the mind; and if both these fail, yet feeling has the sense conveyed by the touch, or by tasting; which gives a general conception through the whole nervous system, to present every object to this ethereal lamp as long as there is life in the body, and when all the functions of the life are suspended, as in the case of drowning, when the body has been under water for a considerable time, and then restored to life again after the rules of the humane society; what is recollect ed in such cases is seldom more, than there having had a great flash of light surrounding them.

From

From which we may infer that at death, the soul, both mind and spirit will take wing, arrayed in etherial lustre to the realms of eternal day, to enjoy the wondrous things God has prepared for them that love him, and there wait the reunion of the body after corruption has dis-united matter from spirit at the general resurrection; when every creature will be delivered from the bondage of corruption, into the glorious liberty of the children of God—my favorite horse, my dog, my cat,—so is the opinion of St. Paul, who saw in the third heavens things which were not to be uttered, Romans, chap. viii. verse 19 to the 23. He there says, “ For the earnest expectation of the creature waiteth for the manifestation of the sons of God. For the creature was made subject to vanity, not willingly, but by reason of him that hath subjected the same in hope. Because the creature itself shall be delivered from the bondage of corruption, into the glorious liberty of the children of God. For we know that the whole creation groaneth and travelleth in pain together until now. And not only they, but ourselves also, which have the first fruits of the spirit, even we ourselves, groan within ourselves, waiting for the adoption, to wit—the redemption of our body.”

I here leave the reader to his own reflections—whether every living creature has not, as well as man, a triune principle—of mind, (with the faculties, memory, affection, fear, &c.) of electric spirit, and of earth?—If the soul of every animal who are co-existent with us in this life, are conducted to heaven at death—it may be conceived the infinity of space where the Almighty displays his glory, is every moment increased by millions of millions of the souls of the creatures of this world, and on quiting earthly clay are arrayed in the realms of his brightness.—What immense lustre must that brightness be, which may be conveyed by thousands of mediums to suit the frail sight of mortals?—through the nearest medium to us, the sun by day, and weakened once more by the moon borrowed light at night.

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